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## EPIDENDRUM CYSTOSUM, A NEW SPECIES FROM THE REPUBLIC OF HONDURAS

BY

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The following description of *Epidendrum cystosum*, a new species of the genus Epidendrum, was prepared from specimens collected by James B. Edwards in the Republic of Honduras.

Epidendrum cystosum is a remarkable species without close allies. It is distantly related to E. physodes Reichb.f., a native of Costa Rica. From E. physodes it differs vegetatively in its obliquely ascending, chartaceous leaves, shorter stems and in the form of the labellum. It resembles E. physodes in having a vesicular pouch adnate to the summit of the ovary at the base of the labellum and in having the flowers succedent, usually a single flower being open at one time. The vesicular pouch indicates relationship with E. prostratum (Lindl.) Cogn., (Physinga prostrata Lindl.), from British Guiana, a species regarding which little is known and whose generic status, notwithstanding Cogniaux's conclusions, is still in doubt. E. cystosum differs conspicuously from E. prostratum in having the sepals almost entirely free at the base, not united to form a cup "as in Masdevallia," and in having a dissimilar labellum, a simple gynostemium and a vesicular pouch which is completely adnate to the ovary.

Recently Dr. R. Mansfeld (in Fedde Repert. 28 (1930)94) identified a species from Nanchital in the State of Vera Cruz, Mexico, as being referable to *Epidendrum prostratum* (Lindl.) Cogn., thus bringing this doubtful species into the flora of Middle America, but from the specimen I have examined, the Mexican plant appears to be referable to *E. physodes* and is in the same alliance with *E.cystosum*. From Lindley's analysis of his *Physinga prostrata* it is very evident that the structure of the labellum and its vesicular pouch differ markedly from what obtains in *Epidendrum physodes* and in the Mexican species associated with *Physinga prostrata* by Dr. Mansfeld.

Unfortunately only two specimens of *Epidendrum* cystosum (excluding an inflorescence in alcohol), have been available for study. Each specimen consists of a single leafy stem terminated by an elongated, pedunculate inflorescence. From these specimens it is not at all clear that the stems were densely caespitose, but an adhering fragment found at the base of one of the stems indicates that a densely caespitose habit may be typical of this species.

In the accompanying illustration the single stem represented may have been taken from a tuft of stems separated by the collector to facilitate the preparation of dried specimens. The drawings of the flower and the details of the expanded portion of the labellum were made with the aid of an inflorescence preserved in alcohol and show that the labellum in a fresh state is conspicuously thickened along the nerves.

### Epidendrum cystosum Ames, sp. nov.

Herba epiphytica, verisimiliter caespitosa, humilis, gracilis. Radices fibratae, elongatae, carnosae, glabrae, patentes. Caules erecti, complanati, paucifoliati, vaginis

foliorum obtecti. Folia in sicco chartacea, disticha, oblique adscendentia, anguste oblonga vel lineari-lanceolata, utrinque angustata, apice acuta. Vaginae foliorum complanatae, elongatae, persistentes. Pedunculus valde elongatus, pauciflorus floribus succedaneis, paucivaginatus vaginis plus minusve imbricatis et complanatis et distichis. Bracteae inflorescentiae infundibuliformes, confertae. Sepala lateralia patentia vel oblique porrecta, lanceolata, usque ad apicem attenuata, trinervia, acuta, extus per medium carinata. Sepalum dorsale simile, trinervium. Petala patentia, linearia, usque ad apicem attenuata, acuta, uninervia. Labellum simplex, valde incrassatum, leviter deflexum, columnae valde adnatum, in laminam suborbicularem leviter concavam expansum, apice acutum. Discus costis valde incrassatis ornatus, nervo medio supra medium valde incrassato. Columna usque ad apicem vix dilatata, simplex. Ovarium elongatum sacco vesiciformi apice instructum.

Epiphytic herb about 13 cm. tall. Roots coarsely fibrous, smooth, longitudinally sulcate, whitish, spreading. Stems probably caespitose, erect, 4.5-5.5 cm. long, bearing about six leaves, complanate. Leaves 4.5-8 cm. long, 3.5-6 mm. wide, obliquely ascending, the uppermost one exceeding the tip of the raceme, chartaceous when dry, narrowly oblong or linear-lanceolate, tapering gradually to the acute tip, narrowed toward the base and jointed to tubular complanate sheaths which are about 15 mm. long and 2-3 mm. in greatest diameter. Peduncle terminal, to the tip of the rachis about 4.5 cm. long, fewflowered, usually one flower open at a time with the succeeding flower in bud. Peduncular sheaths about three, closely appressed, imbricating, complanate, acute, the tip of the uppermost one extending beyond the lowermost floral bract, the lowermost sheath about 2 cm. long. Rachis of the raceme 4-7 mm. long. Bracts of the ra-

#### EXPLANATION OF ILLUSTRATION

EPIDENDRUM CYSTOSUM Ames. Plant natural size drawn from the type. 1, upper part of the inflorescence showing the expanded flower and a bud. 2, side view of the expanded flower showing the vesicular pouch at the summit of the ovary. 3, labellum and adherent column drawn very much enlarged with the aid of the camera lucida. Figures 1–3 drawn from material preserved in alcohol.

Drawn July 1934 by Blanche Ames



EPIDENDRUM eystosum Ames

ceme infundibuliform, about 2.5 mm. long, acute, crowded. Lateral sepals lanceolate, 9 mm. long, 3 mm. wide, obliquely porrect, very slightly coherent at the base, acuminate, acute, somewhat conduplicate at the apex, 3-nerved with the mid-nerve carinate on the outer surface. Dorsal sepal similar, 3-nerved, reflexed, at the base lightly coherent with the lateral sepals. Petals linear, 8.5 mm. long, spreading, tapering gradually to an acute tip, 1-nerved. Labellum about 8 mm. long, adnate below the middle to the column, free portion 5 mm. long, 5 mm. wide, elliptical or suborbicular, acute, very fleshy, rigid, somewhat deflexed, lightly concave with a conspicuous elongated callus extending along the mid-nerve which is very prominent from the middle almost to the apex, this callus being joined on each side by an elongated, much thickened simple or branching costa and with a free intramarginal costa, (simple or branched) on each side extending from the base of the free portion almost to the apex. Column 3.5 mm. long, completely adnate to the labellum, minutely denticulate on the margin of the clinandrium. Pedicellate ovary 11 mm. long with a pouchlike swelling where the ovary joins the base of the labellum.

Department of Yoro, Bajo Grande. Epiphyte in dense mountainforest at 3000 feet altitude. Sepals and petals light lavender; labellum greenish-yellow with light lavender ticking on the margin; column greenish-white with light lavender ticking. March 14, 1934. J. B. Edwards 675 (Type in Herb. Ames 40087.)